AMENDMENTS TO THE SPECIFICATION:

Under "Brief Description of the Drawings"

On page 90, lines 26- page 89, lines 1-3:

FIG. 4 is an oblique perspective diagram illustrating an example of a method for making the sensor chip of FIG. 1.

FIG. 4(a) is the substrate for the method of making the sensor chip of FIG. 4.

FIG. 4(b) is the first process of forming plural uneven surfaces each of which has uneven form in plural positions partly on the substrate surface.

FIG. 4(c) is the second process of lamination over the surface of the substrate shown in FIG 4(a). with a metal layer.

On page 92, lines 26

FIG. 18 is an oblique perspective diagram illustrating an example of a method for making the sensor chip of FIG. 15.

FIG. 18(a) is the substrate for the method of making the sensor chip of FIG. 18.

FIG. 18(b) is the first process of making an uneven form (grating).

FIG. 18(c) is the second process of lamination over the surface of the substrate shown in FIG. 18(a) with a metal layer.

Under Best Mode:

On page 141, line 14:

Meanwhile, the sensor chip 1 can be embodied with some modification in such a form as the sensor chip 201' shown in FIG. 19. Namely, instead of disposed continuously, the areas 251-254 having different groove pitches of the diffraction grating 205 are disposed discretely on the metal layer 203 in such a manner that they have the same groove orientation. With this structure, it is also possible to achieve the same operations and advantages as achieved by the sensor chip 201.

On page 189, line 6:

After that, this sensor chip was formed into a rectangular shape with side-lengths of 15 mm and 25 mm such that the diffraction gratings were arranged thereon in parallel to the 25-mm sides. FIG. 39 shows an example of the thus produced sensor chip with the rectangular area D.

On page 190, lines 9-10:

A central 10 mm × 10 mm area of the thus produced sensor chip served as a measurement spot, and angle scanning was performed using a resonance angle detecting type SPR assessment device, FLEX CHIPS™ Kinetic Analysis System (*HTS Biosystems Inc.*), to measure the intensity of reflected light. With use of light of a wavelength of approximately 870 nm as incident light, and purified water, as a sample, measurement was performed at arbitrary three points in each of the above-mentioned areas.

On page 191, line 17:

Next, a flat-shaped sensor chip was separately prepared without being folded as in FIG. 39, and angle scanning was performed, as in the cases of the areas A, B, and C, using a resonance angle detecting type SPR assessment device, FLEX CHIPS™ Kinetic Analysis System (*HTS Biosystems Inc.*), to measure the intensity of reflected light. With use of a light beam of a

wavelength of approximately 870 nm as incident light, and purified water, as a sample, measurement was performed at 400 points in area D of the flat-shaped sensor chip.

On page 194, line 1:

Using the thus produced sensor chip that was given 26 surfaces with different inclination angles, angle scanning was performed by an SPR assessment device, FLEX CHIPS™ Kinetic Analysis System *(HTS Biosystems Inc)*, to measure the intensity of reflected light. The sample was purified water, and a light beam of a wavelength of approximately 870 nm was used as incident light. The resonance angle of each of the areas was identified to compare with the measurement result in the area D, which had no inclination angle, in Example 1, so as to find the inclination angles of the separate areas. The following table 3 shows the measurement results.

On page 195, line 7:

After that, using this sensor chip in an SPR assessment device, FLEX CHIPS™ Kinetic Analysis System *(HTS Biosystems Inc.)*, the intensity of reflected light was measured. A light beam of a wavelength of approximately 870 nm was used as incident light, and ethanol aqueous solution concentrations of 2.5, 5, 10, 20, 30, 40, and 50 per cent were used as samples.

On page 203, lines 17-18:

Using the thus produced sensor chip, angle scanning was performed with a resonance angle detecting type SPR assessment device, FLEX CHIPS™ Kinetic Analysis System (*HTS Biosystems Inc.*), to measure the intensity of reflected light. In the measurement, a light beam of a wavelength of approximately 870 nm was used as incident light, and purified water served as a sample.

On page 205, lines 20-21:

On this sensor chip, there are provided 2.5 mm-wide areas where diffraction gratings with separate groove pitches (TP) of, 846 nm, 856 nm, 870 nm, and 876 nm, respectively, are formed. Using this sensor chip, the intensity of reflected light was measured with an SPR assessment device, FLEX CHIPS™ Kinetic Analysis System (*HTS Biosystems Inc.*), while varying the angle

of incident light in a range of 19.89° to 21.18°. Purified water, 1% ethanol aqueous solution, 10% ethanol aqueous solution, and 30% ethanol aqueous solution served as samples, which were introduced in order onto the surface of the sensor chip. In this instance, the temperature of the solutions was 30°C, and the wavelength of the incident light was 870 nm.

On page 209, lines 10-11:

As in the case of Example 1, using a sensor chip on which provided were 2.5-mm-wide areas where diffraction gratings with separate groove pitches (TP) of, 846 nm, 856 nm, 870 nm, and 876 nm, respectively, are formed, the intensity of reflected light was measured while irradiating a sample with light at a fixed incident angle. The measurement was performed with an SPR assessment device, FLEX CHIPS™ Kinetic Analysis System *(HTS Biosystems Inc.)*, and purified water and 10% ethanol aqueous solution were used as samples. The temperature of the samples was 30°C at the measurement; the wavelength of the incident light was 875 nm; and the incident angle of the incident light was 20.8502°.